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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,299	12/28/2000	Mark Madden	DIVER1440-2	8629

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EXAMINER
KERR, KATHLEEN M

ART UNIT	PAPER NUMBER
1652	

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Offic Action Summary	Application No.	Applicant(s)	
	09/751,299	MADDEN ET AL.	
	Examiner	Art Unit	
	Kathleen M Kerr	1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) *18-21 and 25-30* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17,22-24 and 31-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Application Status

1. In response to the previous Office action, a non-Final rejection (Paper No. 17, mailed on April 17, 2003), Applicants filed a response and amendment received on July 22, 2003 (Paper No. 19). Said amendment amended Claims 1, 2, 10, 22, 24, 31, 32, and 36, and added new Claims 38-44. Thus, Claims 1-44 are pending in the instant Office action.

Election

2. Claims 1-44 are pending in the instant application. Claims 18-21 and 25-30 remain withdrawn from consideration as non-elected inventions. Claims 1-17, 22-24, and 31-44 will be examined herein.

This application contains claims 18-21 and 25-30 drawn to an invention nonelected with traverse in Paper No. 16. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 C.F.R. § 1.144) See M.P.E.P. § 821.01.

Priority

3. As previously noted, the instant application is granted the benefit of priority for the U.S. Provisional Application Nos. 60/173,609 and 60/254,414 filed on December 29, 1999 and December 7, 2000, respectively.

Information Disclosure Statement

4. In Applicants' remarks, page 23 of their response, a supplemental IDS is noted as being filed; none has been received.

Withdrawn- Objections to the Specification

5. Previous objection to the specification because the title is not descriptive is withdrawn by virtue of Applicants' amendment.

6. Previous objection to the Abstract for not completely describing the disclosed subject matter is withdrawn. While Applicants did not insert the term "Strecker reagents" into the Abstract to describe the cyanide, ammonia, and hydrolysis combination, the term has been amended into the title.

7. Previous objection to the specification for informalities is withdrawn by virtue of Applicant's amendment.

8. Previous objection to the specification for inappropriate notation of an internet address is withdrawn by virtue of Applicant's amendment.

9. Previous objection to the specification for being confusing on page 73, line 30, referring to a figure when there are none in the specification is withdrawn by virtue of Applicant's amendment.

10. Previous objection to the specification for being confusing in its reference to component numbers is withdrawn by virtue of Applicants' amendment.

Withdrawn - Claim Objections

11. Previous objection to Claim 10 for depending from itself is withdrawn by virtue of Applicant's amendment.

Withdrawn - Claim Rejections - 35 U.S.C. § 112, second paragraph

12. Previous rejection of Claims 1-17, 24, and 31-37 under 35 U.S.C. § 112, second paragraph, as being indefinite for the term "nitrilase or a polypeptide having nitrilase activity" is withdrawn by virtue of Applicants' response which clarifies that any enzyme having the prescribed activity is intended to be within the scope of the claims.

13. Previous rejection of Claims 2-4, 6, 8, 9 under 35 U.S.C. § 112, second paragraph, as being indefinite for the phrase "optionally R1 and R2 are linked to cooperate to form a functional cyclic moiety" is withdrawn by virtue of Applicants' amendment.

14. Previous rejection of Claim 32 under 35 U.S.C. § 112, second paragraph, as being indefinite for the antecedent basis of the "intermediate of step (a)" is withdrawn by virtue of Applicants' amendment.

Maintained - Claim Rejections - 35 U.S.C. § 112, second paragraph

15. Previous rejection of Claims 2-10 under 35 U.S.C. § 112, second paragraph, as being indefinite for the meaning of the "*" by the center "C" is maintained. Applicants have noted that the asterisk has been removed by amendment; this is not the case. Clarification is required.

16. Previous rejection of Claims 22-24 under 35 U.S.C. § 112, second paragraph, as being indefinite for the phrases "amino acid sequence as set forth in SEQ ID NO:2 or SEQ ID NO:4" and "a nucleic acid sequence as set forth in SEQ ID NO:1 or SEQ ID NO:3" is maintained. Also, new Claims 38-42 and 44 are added to the instant rejection. Applicants have argued that the definition of the above phrases are as found in the art; that is, exactly SEQ ID NO:2, for

example. However, the claims must stand alone with the specification to determine their meaning and scope. Thus, with the definition remaining in the specification on pages 61-62, the metes and bounds of the phrases remain unclear, despite Applicants clarifying the record as to what is intended to be the scope of the claims. The specification must be amended to remove the definition that is contradictory to the art and to the scope intended by Applicants.

Withdrawn - Claim Rejections - 35 U.S.C. § 112, first paragraph

17. Previous rejection of Claim 24 under 35 U.S.C. § 112, first paragraph, written description, is withdrawn by virtue of Applicants' amendment inserting a specific function into Claim 24. Despite the fact the genus claimed is extremely broad and only two examples are disclosed in the instant specification, all the claims (including new claims 38-44) require relation to a particular structure and a specific function. The specification describes all structural variants of SEQ ID NOs: 2 and 4 within the functional limitations provided in Claim 24.

18. Previous rejection of Claims 22-23 under 35 U.S.C. § 112, first paragraph, enablement, is withdrawn by virtue of Applicants' declaration filed July 22, 2003. The rejection had been set forth against these two claims because of omissions in the specification relating to BD1911 and BD1921 being lysates of recombinantly expressed SEQ ID NOs:2 and 4 and relating to the phenylglycine produced in Example 1 as enantiomerically pure D-phenylglycine. Inventor Chaplin has attested to these facts, as they were implied by the specification.

The Examiner does note the following discrepancies in the declaration. In item 3 of the declaration, page 78 (not page 76) describes Example 1 in the specification. The expression of the bacterial genes in *Pseudomonas* or *E. coli* would likely produce identical (or virtually

identical) polypeptides; thus, this error in the specification is irrelevant to its enablement. In item 6 of the declaration, Inventor Chaplin describes the actual experiment from Example 1, but again notes that the genes were expressed in *Pseudomonas* (not *E. coli*), which is contradictory to item 3. Again, this does not effect the enablement of Claims 22-23.

Maintained - Claim Rejections - 35 U.S.C. § 112, first paragraph

19. Previous rejection of Claims 1-17 and 31-37 under 35 U.S.C. § 112, first paragraph, written description, is maintained. Applicants' arguments have been fully considered but are not deemed persuasive for the following reasons.

Applicants argue "[n]itrilases that can be used to practice the methods of claims 1, 31, 32, and 36, include those known in the art. Thus, written description issues for claiming a novel genetic material are not applicable to the methods of claims 1, 31, 32, and 36, and the nitrilases used to practice these methods." This argument is not persuasive because the genus of nitrilases known in the art is enormous compared to the subgenus of nitrilases useful for the claimed invention. One of skill in the art would be unable to distinguish between useful and non-useful nitrilases from among all nitrilases known in the art because the distinguishing features are functional ONLY without any correlation to structure, which correlation, as noted previously, is required to adequately describe a claimed genus.

Applicants' extensive arguments for claims 22-24 and 38-44 are moot. Firstly, the Examiner did not reject claims 22-23 under written description. Secondly, with the amendment to a specific function in Claim 24, even broad structural requirement correlated with a particular function satisfy the written description requirement as noted above.

Applicants argue "the issue of whether one skilled in the art would be able to identify other nitrilases … useful in the claimed methods by virtue of the instant disclosure is a question of enablement"; the Examiner does not disagree. However, the issue of written description requires that one of skill in the art be able to *recognize* members of the subgenus of nitrilases useful in the invention from the genus of all known nitrilases. That is not the case based on the limited disclosure of the structure and function of two examples of nitrilases in this subgenus.

Applicants argue that the structure of chemical compound, such as D-phenylalanine, were well known in the art at the time of the invention so their structures are not necessary in the description. The Examiner does not argue that the structure of the chemical compounds were known (if this had not been the case, a rejection under 35 U.S.C. § 112, second paragraph would have been necessary); at issue is whether or not methods of making this compounds are adequately described. In other words, what different method steps with respect to the single exemplary method of benzaldehyde to make phenylglycine would be required to make, for example, D-phenylalanine. These steps are what do not have adequate written description.

20. Previous rejection of Claims 5 and 7-10 under 35 U.S.C. § 112, first paragraph, enablement, is maintained; the rejection of Claim 24 is amended below in a new rejection but Applicants' arguments will be considered here as they apply to rejection of all the claims. Applicants' arguments have been fully considered but are not deemed persuasive for the following reasons.

Applicants argue that it would not have taken undue experimentation to screen for nitrilases to practice the claimed methods because the amount of experimentation necessary does not define its being "undue". The Examiner does not disagree and this is why several of the

Wands factors were addressed to define the methods as requiring undue experimentation to be able to practice. It was previously noted for Claims 5 and 7 that "[c]opious amounts of experimentation would be required to either find or engineer other nitrilases to produce particular α-substituted amino acid. The specification provides no guidance or working examples for the production of such nitrilases. The state of the prior art is such that numerous nitrilases that use aminonitriles as substrates to produce amino acids are known (see art rejections below), but none specifically to produce those amino acids noted in Claims 5 and 7. The predictability of finding or engineering other nitrilases to produce specific α-substituted amino acid is extremely low considering the state of the art and the instant disclosure. Thus, using **any** nitrilase to produce **specific** α-substituted carboxylic acid is not enabled to the full extent of its scope." This same argument was set forth for Claims 8-10. While some experimentation can be required to enable an invention, this experimentation must be routine. The amount of unpredictability renders this impossible for the instant claims.

Maintained - Claim Rejections - 35 U.S.C. § 102

21. Previous rejection of Claims 1-4, 6, 11-17, 31, and 33-36 under 35 U.S.C. § 102(b) as being anticipated by Wakamoto *et al.* as evidenced by Iyer *et al.* is maintained. Applicants' arguments have been fully considered but are not deemed persuasive for the following reasons.

Applicants argue that Wakamoto *et al.* do not teach using "recombinantly generated nitrilases". While this is the case, Wakamoto *et al.* teach using equivalent nitrilases since recombinant generation, in the instant case, does not change the nature of the polypeptide (the nitrilase) used whatsoever. In the specification on page 9, recombinant polypeptides are

described as being produced from expression of exogenous DNA in a host cell. In the instant application (in view of Inventor Chaplin's declaration), the host cell expressing the exogenous DNA is *E. coli*, which does not post-translationally modify its expressed proteins. Thus, recombinantly generated polypeptides would be identical to naturally occurring bacterial polypeptides. If Applicants want this "adjective" to have significant meaning in the claim, then a method step requiring recombinant production of the nitrilase must be added to the claims expressly since a recombinantly produced polypeptide is equivalent to a native polypeptide in the instant case and only the product is required, not the method steps surrounding the product used (i.e., if the same product can be produced by different means, use of that product in the claimed methods still meets all the limitations of the claims).

Applicants argue that Wakamoto *et al.* do not teach the specifics of the Strecker reaction and, thus, cannot anticipate the claims as a single prior art source. However, the M.P.E.P. allows for multiple reference rejections under 35 U.S.C. § 102 (see M.P.E.P. § 2131.01) wherein the extra reference is cited to "show that a characteristic not disclosed in the reference is inherent". Thus, Iyer *et al.* describe the Strecker reaction and all its variations as indicated for use by Wakamoto *et al.*; these are inherent features of the Strecker reaction used by Wakamoto *et al.*

22. Previous rejection of Claim 32 under 35 U.S.C. § 102(b) as being anticipated by Wakamoto *et al.* is maintained. Applicants' arguments have been fully considered but are not deemed persuasive for the following reasons.

Applicants argue that Wakamoto *et al.* do not teach using "recombinantly generated nitrilases". While this is the case, Wakamoto *et al.* teach using equivalent nitrilases since

recombinant generation, in the instant case, does not change the nature of the polypeptide (the nitrilase) used whatsoever. In the specification on page 9, recombinant polypeptides are described as being produced from expression of exogenous DNA in a host cell. In the instant application (in view of Inventor Chaplin's declaration), the host cell expressing the exogenous DNA is *E. coli*, which does not post-translationally modify its expressed proteins. Thus, recombinantly generated polypeptides would be identical to naturally occurring bacterial polypeptides.

23. Previous rejection of Claims 32 and 37 under 35 U.S.C. § 102(b) as being anticipated by Bhalla *et al.* is maintained. Applicants' arguments have been fully considered but are not deemed persuasive for the following reasons.

Applicants argue that Bhalla *et al.* do not teach using "recombinantly generated nitrilases". While this is the case, Bhalla *et al.* teach using equivalent nitrilases since recombinant generation, in the instant case, does not change the nature of the polypeptide (the nitrilase) used whatsoever. In the specification on page 9, recombinant polypeptides are described as being produced from expression of exogenous DNA in a host cell. In the instant application (in view of Inventor Chaplin's declaration), the host cell expressing the exogenous DNA is *E. coli*, which does not post-translationally modify its expressed proteins. Thus, recombinantly generated polypeptides would be identical to naturally occurring bacterial polypeptides.

NEW ISSUES

Objections to the Specification

24. The amendment filed July 22, 2003 is objected to under 35 U.S.C. § 132 because it introduces new matter into the disclosure. 35 U.S.C. § 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

a) On page 78, the amended paragraph defined enzyme preparation BD 1911 as SEQ ID NO:2 as encoded by SEQ ID NO:1 and enzyme preparation BD 1921 as SEQ ID NO:4 as encoded by SEQ ID NO:3.

The definition of the enzyme preparations as particular SEQ ID NOs is not supported in the specification as originally filed. While the specification contained a sequence listing in diskette form on the day of filing, December 28, 2000, the computer readable sequence listing referred to SEQ ID NOs:1-4 only as "description of unknown organism: obtained from an environmental sample" and not specifically as BD1911 or 1921. Thus, the correlation between the enzyme preparations and particular SEQ ID NOs is considered new matter.

Applicant is required to cancel the new matter or to point out specific page and line number where support for the amendment can be found in the reply to this Office Action.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

25. Claims 22-24 and 38-43 are rejected under 35 U.S.C. § 112, first paragraph, new matter, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In Claims 22-24 and 38-42, the term "enzymatically active fragments" has been added; the Examiner cannot find support on the specification as originally filed for this amendment. Applicant is required to cancel the new matter or to point out specific page and line number where support for the amendment can be found in the reply to this Office Action.

26. Claims 24 and 38-44 are rejected under 35 U.S.C. § 112, first paragraph, scope of enablement, because the specification, while being enabling for methods using SEQ ID NOs: 2 or 4 or their encoding DNAs, does not reasonably provide enablement for methods using polypeptides related to these SEQ ID NOs. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. To practice the claimed methods, one of skill in the art would be required to make nitrilase polypeptides within the sequence identity and functional limitations. Based on the disclosure in the specification and the art, the making of such polypeptides would require undue experimentation.

The factors to be considered in determining whether undue experimentation is required are summarized In re Wands 858 F.2d 731, 8 USPQ2nd 1400 (Fed. Cir, 1988). The Court in Wands states: "Enablement is not precluded by the necessity for some experimentation such as routine screening. However, experimentation needed to practice the invention must not be undue

experimentation. The key word is 'undue,' not 'experimentation.' " (Wands, 8 USPQ2d 1404). Clearly, enablement of a claimed invention cannot be predicated on the basis of quantity of experimentation required to make or use the invention. "Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations." (Wands, 8 USPQ2d 1404). The factors to be considered in determining whether undue experimentation is required include: (1) the quantity of experimentation necessary, (2) the amount or direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. While all of these factors are considered, a sufficient amount for a *prima facie* case is discussed below.

The only example in the specification is on pages 77-78. Therein, benzaldehyde, KCN, and NH_4Cl are combined to produce phenylglycinonitrile, a chiral α-amino nitrile compound; this is by a known reaction (Strecker reaction). A declaration filed on July 22, 2003 by Inventor Chaplin clarifies this example as using SEQ ID NOs: 2 or 4 from cell lysates expressing genes from BD1911 and BD1921 to produce enantiomerically pure (S)-phenylglycine.

The variation of the nitrilase is not enabled for use in producing enantiomerically pure D-phenylglycine. The breadth of Claims 24, 43, and 44 is enormous. No working examples or guidance concerning the variation of either SEQ ID NOs: 2 or 4 is described. One of skill in the art would be wholly unable to predict regions in the enzymes available for variation with retention of the nitrilase activity. While the Examiner agrees that one of skill in the art would be able to screen for and possibly find nitrilases as claimed, the ability to find is not equivalent to

the ability to make as required by the statute. Thus, Claims 24 and 38-44 are not enabled to the full extent of their scope without some discussion of structure and function in this, apparently relatively novel, class of enzymes.

Additional Issue

27. Since the record is unclear to this issue, the Examiner will request clarification. On page 78 of the specification, the specification notes that genes from particular sources were expressed in *Pseudomonas*. In Inventor Chaplin's declaration (July 22, 2003), item 3, she declares that this disclosure was in error and that the expression of the gene(s) was in *E. coli*. In item 6 of this same declaration, *Pseudomonas* is the host cell (in direct contradiction to item 3). In Applicants' remarks on page 33 (Paper filed July 22, 2003), Applicants' representative states that the expression system was *Pseudomonas*. To clarify the record, what expression system was used as related in Example 1 of the specification? Has the other expression system been used since then? Results? These questions are merely to clarify the record and do not bear on enablement questions as noted above.

Summary of Pending Issues

28. The following is a summary of the issues pending in the instant application:

a) The amendment filed July 22, 2003 stands objected to under 35 U.S.C. § 132 because it introduces new matter into the disclosure.
b) Claims 2-10 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the meaning of the "*" by the center "C".
c) Claims 22-24 and 38-44 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the phrases "amino acid sequence as set forth in SEQ ID NO:2 or SEQ ID NO:4" and "a nucleic acid sequence as set forth in SEQ ID NO:1 or SEQ ID NO:3".
d) Claims 22-24 and 38-43 stand rejected under 35 U.S.C. § 112, first paragraph, new matter.

e) Claims 1-17 and 31-37 stand rejected under 35 U.S.C. § 112, first paragraph, written description.
f) Claims 5 and 7-10 stand rejected under 35 U.S.C. § 112, first paragraph, enablement.
g) Claims 24 and 38-44 stand rejected under 35 U.S.C. § 112, first paragraph, scope of enablement.
h) Claims 1-4, 6, 11-17, 31, and 33-36 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wakamoto *et al.* as evidenced by Iyer *et al.*
i) Claim 32 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Wakamoto *et al.*
j) Claims 32 and 37 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bhalla *et al.*
k) Clarification of the issue of the host cell from the Examples in the specification.

Conclusion

29. Claims 1-17, 22-24, and 31-44 are rejected for the reasons identified in the numbered sections of this Office action. Applicants must respond to the objections/rejections in each of the numbered sections in this Office action to be fully responsive in prosecution.

Non-elected Claims 18-21 and 25-30 must be cancelled in a complete response to this Final rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen M Kerr whose telephone number is (703) 305-1229. The examiner can normally be reached on Monday through Friday, from 8:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathupura Achutamurthy can be reached on (703) 308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

PONNATHAPU ACHUTAMURTHY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

KMK
September 26, 2003